Title (en)

PASSIVE ELECTRODE BLANKETING IN A FUEL CELL

Title (de)

PASSIVER ELEKTRODENSCHUTZ IN EINER BRENNSTOFFZELLE

Title (fr)

INTEGRATION D'ELECTRODE PASSIVE DANS UNE PILE A COMBUSTIBLE

Publication

EP 1665433 B1 20101124 (EN)

Application

EP 04737893 A 20040625

Priority

- CA 2004000954 W 20040625
- US 48201003 P 20030625
- US 49509103 P 20030815

Abstract (en)

[origin: WO2004114448A2] When a conventional fuel cell module is shutdown the conditions within the fuel cell stack change. The conditions change because elements that support and regulate the operation of the fuel cell stack switch to their respective shutdown states. For example, the input and output valves are closed, which cuts off the supply inflows and exhaust outflows. Moreover, when an element such as a flow control device switches to a shutdown state internal conditions, such as for example, the pressure within the anode electrodes change. When the internal conditions of the fuel cell stack change the reactants (e.g. hydrogen and oxygen) remaining in the fuel cell stack and the feed lines (between the fuel cell stack and the closed valves) are substantially consumed in combustion reactions as opposed to being consumed in electrochemical reactions yielding a useful form of energy.

IPC 8 full level

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CPC (source: EP US)

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